

Work Order ID 91835

91835

Page 1

October-19-12 12:39:25 PM

Item ID: D2282-043

Accept

N900040100

Setup

Start

NS1

Revision ID:

Item Name: Saddle Assembly

Stop

NS2

Start Date: 10/22/12 Start Qty: 5.00

5

Cust Item ID:

Required Date: 11/09/12 Req'd Qty: 5.00

5

Customer:

Reference:

Approvals:	Process Plan:	Date: 10/19	Tooling:	Date:	Run	Start	*NR1*
	QC:	Date:	SPC (Y/N):	Date:	Stop		*NR2*

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
Draw Nbr	Revision Nbr								
100		0.00							
100	Large Fab								
Large Fab	Memo	0.00							
Large Fab	I-Weld as per D2282-043 Saddle Assembly A/RER316L SS Filling Rod M126048 Dwg Rev: E								
110		0.00							
110	Small Fab								
Small Fab	Memo	0.00							
Small Fab	I- Grind weld with rough pad and brown pad, take all welding marks out and debur holes***DO NOT TAKE RED AND BLUE PAD TO BUFF PART***								
120	QC9- Inspect visual per QSI004- Fusion Welds	0.00							
120	Memo	0.00							
QC									
Quality Control									

DAS
9
9-89

(35) B-10-22

NCR: Yes / No

DQA: _____ Date: _____

WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order: _____			DISPOSITION			AGAINST DEPARTMENT/PROCESS					
			Rework <input type="checkbox"/>	Skid-tube <input type="checkbox"/>	Crosstube <input type="checkbox"/>	Water Jet <input type="checkbox"/>	Engineering <input type="checkbox"/>				
			Scrap <input type="checkbox"/>	Machining <input type="checkbox"/>	Small Fab <input type="checkbox"/>	Prod. Eng. Coor. <input type="checkbox"/>	Quality <input type="checkbox"/>				
			Use-as-is <input type="checkbox"/>	Thermoforming <input type="checkbox"/>	Finishing <input type="checkbox"/>	Rec/Store/Packaging <input type="checkbox"/>	Other <input type="checkbox"/>				
			Work Order Update <input type="checkbox"/>	Large Fab <input type="checkbox"/>	Composite <input type="checkbox"/>	Supplier <input type="checkbox"/>					
Root Cause	Date	Step	Qty	Description of work order update or Non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector		
Doc/Data											
Equip/Tooling											
Operator											
Material											
Setup											
Other											
Process											
Supplier											
Training											
Unapproved											
FAULT CATEGORY											
Landing Gear <input type="checkbox"/> Bending <input type="checkbox"/> Centre Not Concentric to O/S <input type="checkbox"/> Cracks <input type="checkbox"/> Crushed/Crimped. <input type="checkbox"/> Cuffs <input type="checkbox"/> Heat Treat <input type="checkbox"/> Inspection Strip in Tube <input type="checkbox"/> Ripples in Bend <input type="checkbox"/> Torque Waves in Extrusion <input type="checkbox"/> Turning Sequence <input type="checkbox"/> Wave/Twist in Tube				General <input type="checkbox"/> Bend <input type="checkbox"/> BOM/Route <input type="checkbox"/> Broken/Damaged <input type="checkbox"/> Burrs <input type="checkbox"/> Contamination <input type="checkbox"/> Countersink <input type="checkbox"/> Cut Too Short <input type="checkbox"/> Drill Holes <input type="checkbox"/> Drawing <input type="checkbox"/> Finish <input type="checkbox"/> Folio <input type="checkbox"/> Grain <input type="checkbox"/> Hardware <input type="checkbox"/> Inspection Incomplete <input type="checkbox"/> Instructions Incomplete/Unclear <input type="checkbox"/> Maintenance <input type="checkbox"/> Mislabeled <input type="checkbox"/> Misread <input type="checkbox"/> Offset <input type="checkbox"/> Out of Calibration <input type="checkbox"/> Out of Sequence <input type="checkbox"/> Outside Dimensions							
				<input type="checkbox"/> Ovalized <input type="checkbox"/> Over/Under tolerance <input type="checkbox"/> Part Incorrect <input type="checkbox"/> Part Lost/Missing <input type="checkbox"/> Part Moved <input type="checkbox"/> Positioned Wrong <input type="checkbox"/> Power Loss/Surge <input type="checkbox"/> Other							

Work Order ID 91835

October-19-12 12:39:26 PM

91835

Page 2

Item ID: D2282-043

Accept

N900040100

Setup

Start

NS1

Revision ID:

Item Name: Saddle Assembly

Stop

NS2

Start Date: 10/22/12 **Start Qty:** 5.00

5

Cust Item ID:

Required Date: 11/09/12 **Req'd Qty:** 5.00

5

Customer:

Reference:

Approvals: Process Plan:

Date: _____

Tooling: _____

Date: _____

Run

Start

NR1

QC:

Date: _____

SPC (Y/N): _____

Date: _____

Stop

NR2

**Sequence ID/
Work Center ID**

**Operation
Description**

**Set Up/
Run Hours**

Tool ID

Tool #

**Plan
Code**

**Accept
Qty**

**Reject
Qty**

**Reject
Number**

**Insp.
Stamp**

130

130

Small Fab

Small Fab

Memo

1-Tumble

0.00

35 10/13-10-25

150

150

QC

Quality Control

QC5- Inspect part completeness to step on W/O

0.00

DAS

27

9-89

13/10/28

33

160

160

Packaging

Packaging

Identify as per dwg & Stock Location: 6-A

0.00

0.00

DAS

36

9-89

35

13/10/28

NCR: Yes / No

DQA: _____ Date: _____

WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order: _____		DISPOSITION			AGAINST DEPARTMENT/PROCESS					
Part No. _____		Rework <input type="checkbox"/>	Skid-tube <input type="checkbox"/>	Crosstube <input type="checkbox"/>	Water Jet <input type="checkbox"/>	Engineering <input type="checkbox"/>				
NCR No. _____		Scrap <input type="checkbox"/>	Machining <input type="checkbox"/>	Small Fab <input type="checkbox"/>	Prod. Eng. Coor. <input type="checkbox"/>	Quality <input type="checkbox"/>				
		Use-as-is <input type="checkbox"/>	Thermoforming <input type="checkbox"/>	Finishing <input type="checkbox"/>	Rec/Store/Packaging <input type="checkbox"/>	Other <input type="checkbox"/>				
		Work Order Update <input type="checkbox"/>	Large Fab <input type="checkbox"/>	Composite <input type="checkbox"/>	Supplier <input type="checkbox"/>					
Root Cause	Date	Step	Qty	Description of work order update or Non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector	
Doc/Data										
Equip/Tooling										
Operator										
Material										
Setup										
Other										
Process										
Supplier										
Training										
Unapproved										
FAULT CATEGORY										
Landing Gear <input type="checkbox"/> Bending <input type="checkbox"/> Centre Not Concentric to O/S <input type="checkbox"/> Cracks <input type="checkbox"/> Crushed/Crimped. <input type="checkbox"/> Cuffs <input type="checkbox"/> Heat Treat <input type="checkbox"/> Inspection Strip in Tube <input type="checkbox"/> Ripples in Bend <input type="checkbox"/> Torque Waves in Extrusion <input type="checkbox"/> Turning Sequence <input type="checkbox"/> Wave/Twist in Tube				General <input type="checkbox"/> Bend <input type="checkbox"/> BOM/Route <input type="checkbox"/> Broken/Damaged <input type="checkbox"/> Burrs <input type="checkbox"/> Contamination <input type="checkbox"/> Countersink <input type="checkbox"/> Cut Too Short <input type="checkbox"/> Drill Holes <input type="checkbox"/> Drawing <input type="checkbox"/> Finish <input type="checkbox"/> Folio <input type="checkbox"/> Grain <input type="checkbox"/> Hardware <input type="checkbox"/> Inspection Incomplete <input type="checkbox"/> Instructions Incomplete/Unclear <input type="checkbox"/> Maintenance <input type="checkbox"/> Mislabeled <input type="checkbox"/> Misread <input type="checkbox"/> Offset <input type="checkbox"/> Out of Calibration <input type="checkbox"/> Out of Sequence <input type="checkbox"/> Outside Dimensions						
				<input type="checkbox"/> Ovalized <input type="checkbox"/> Over/Under tolerance <input type="checkbox"/> Part Incorrect <input type="checkbox"/> Part Lost/Missing <input type="checkbox"/> Part Moved <input type="checkbox"/> Positioned Wrong <input type="checkbox"/> Power Loss/Surge <hr/> <hr/> <hr/>						
				<input type="checkbox"/> Pressure/Forced <input type="checkbox"/> Temperature/Cure <input type="checkbox"/> Weld <input type="checkbox"/> Wrong Stock Pulled <hr/>						
				<input type="checkbox"/> Other						

Work Order ID 91835

October-19-12 12:39:26 PM

91835

Page 3

Item ID: D2282-043

Accept

N900040100

Setup

Start

NS1

Revision ID:

Item Name: Saddle Assembly

Stop

NS2

Start Date: 10/22/12 **Start Qty:** 5.00

5

Cust Item ID:

Required Date: 11/09/12 **Req'd Qty:** 5.00

5

Customer:

Reference:

Approvals: Process Plan:

Date: _____

Tooling:

Date: _____

Run

Start

NR1

QC:

Date: _____

SPC (Y/N):

Date: _____

Stop

NR2

**Sequence ID/
Work Center ID**

**Operation
Description**

**Set Up/
Run Hours**

Tool ID

Tool #

**Plan
Code**

**Accept
Qty**

**Reject
Qty**

**Reject
Number**

**Insp.
Stamp**

170

QC21- Final Inspection - Work Order Release

0.00

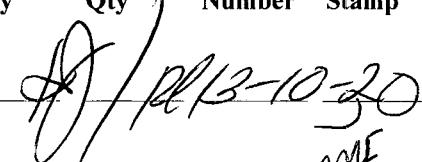
170

QC

Quality Control

Memo

0.00


 10/13-10-20
 MF
 10-29
 13

NCR: Yes / No

WORK ORDER NON-CONFORMANCE / UPDATE

DQA: _____ Date: _____

QA Closed: _____ Date: _____

Work Order: _____			DISPOSITION		AGAINST DEPARTMENT/PROCESS					
			Rework <input type="checkbox"/>	Skid-tube <input type="checkbox"/>	Crosstube <input type="checkbox"/>	Water Jet <input type="checkbox"/>	Engineering <input type="checkbox"/>			
			Scrap <input type="checkbox"/>	Machining <input type="checkbox"/>	Small Fab <input type="checkbox"/>	Prod. Eng. Coor. <input type="checkbox"/>	Quality <input type="checkbox"/>			
			Use-as-is <input type="checkbox"/>	Thermoforming <input type="checkbox"/>	Finishing <input type="checkbox"/>	Rec/Store/Packaging <input type="checkbox"/>	Other <input type="checkbox"/>			
			Work Order Update <input type="checkbox"/>	Large Fab <input type="checkbox"/>	Composite <input type="checkbox"/>	Supplier <input type="checkbox"/>				
Root Cause	Date	Step	Qty	Description of work order update or Non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector	
Doc/Data										
Equip/Tooling										
Operator										
Material										
Setup										
Other										
Process										
Supplier										
Training										
Unapproved										
FAULT CATEGORY										
Landing Gear <input type="checkbox"/> Bending <input type="checkbox"/> Centre Not Concentric to O/S <input type="checkbox"/> Cracks <input type="checkbox"/> Crushed/Crimped. <input type="checkbox"/> Cuffs <input type="checkbox"/> Heat Treat <input type="checkbox"/> Inspection Strip in Tube <input type="checkbox"/> Ripples in Bend <input type="checkbox"/> Torque Waves in Extrusion <input type="checkbox"/> Turning Sequence <input type="checkbox"/> Wave/Twist in Tube				General <input type="checkbox"/> Bend <input type="checkbox"/> BOM/Route <input type="checkbox"/> Broken/Damaged <input type="checkbox"/> Burrs <input type="checkbox"/> Contamination <input type="checkbox"/> Countersink <input type="checkbox"/> Cut Too Short <input type="checkbox"/> Drill Holes <input type="checkbox"/> Drawing <input type="checkbox"/> Finish <input type="checkbox"/> Folio <input type="checkbox"/> Grain <input type="checkbox"/> Hardware <input type="checkbox"/> Inspection Incomplete <input type="checkbox"/> Instructions Incomplete/Unclear <input type="checkbox"/> Maintenance <input type="checkbox"/> Mislabeled <input type="checkbox"/> Misread <input type="checkbox"/> Offset <input type="checkbox"/> Out of Calibration <input type="checkbox"/> Out of Sequence <input type="checkbox"/> Outside Dimensions						
				<input type="checkbox"/> Ovalized <input type="checkbox"/> Over/Under tolerance <input type="checkbox"/> Part Incorrect <input type="checkbox"/> Part Lost/Missing <input type="checkbox"/> Part Moved <input type="checkbox"/> Positioned Wrong <input type="checkbox"/> Power Loss/Surge <input type="checkbox"/> Other						

Picklist Print

October-19-12 12:39:25 PM

Page 1

Work Order ID: 91835

Parent Item: D2282-043

Parent Item Name: Saddle Assembly

Start Date: 10/22/12

Required Date: 11/09/12

Start Qty: 5.00

Required Qty: 5.00

Comments: IPP Rev:A Removed from 9 Digit 05-12-02 JLM

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
---------------------------------	------------------------	---------------	-------------	---------------------	------------------	-----------------	--------------------	----------------	-------------	--------------	---------------	----------------	--------

D2281		Manufactured	No			100	Each	77.0000	1	5			
-------	--	--------------	----	--	--	-----	------	---------	---	---	--	--	--

Jack Saddle

B107833 x 35!

<u>Location</u>	<u>Loc Qty</u>	<u>Loc Code</u>
-----------------	----------------	-----------------

GA	60	
82263	50	
84321	10	
WA020	17	
67539	17	

D2282-7		Manufactured	No			100	Each	77.0000	2	10			
---------	--	--------------	----	--	--	-----	------	---------	---	----	--	--	--

Tube

B 99006 x 21

<u>Location</u>	<u>Loc Qty</u>	<u>Loc Code</u>
-----------------	----------------	-----------------

WA	77	
80015	29	
82269	12	
91305	36	

B 102976 x 45

B 93327 x 41

x35 13-10-22 MAL

13-10-22 MAL

NCR: Yes / No

WORK ORDER NON-CONFORMANCE / UPDATE

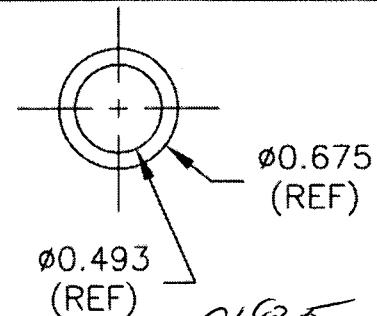
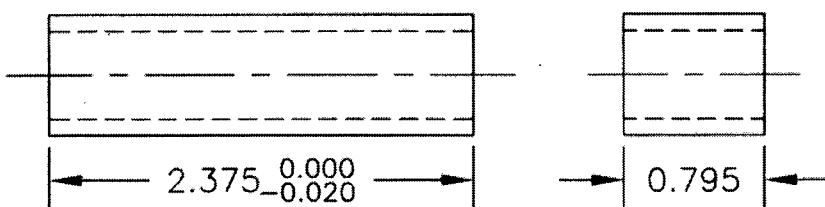
DQA: _____ Date: _____

QA Closed: _____ Date: _____

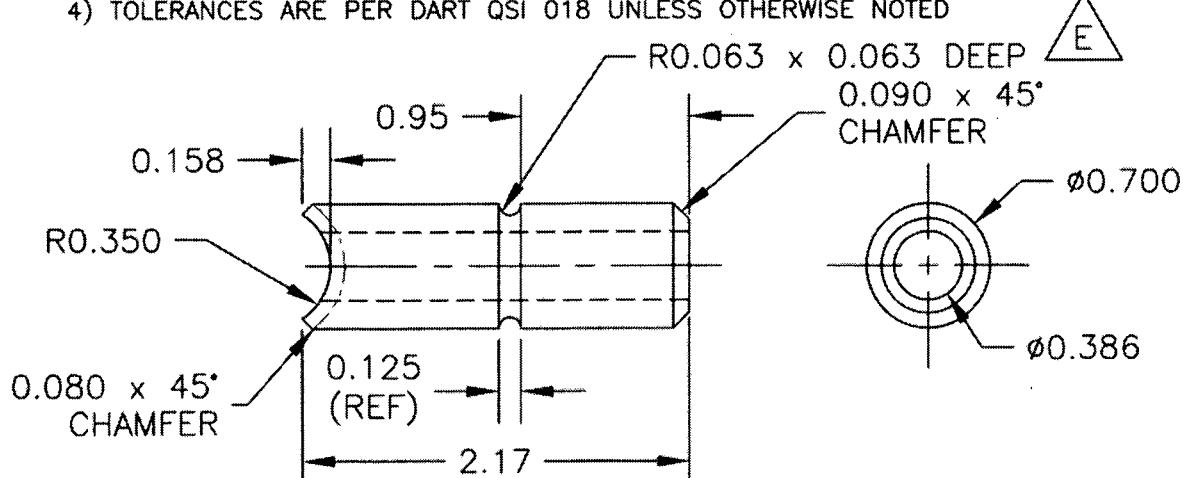
Work Order: _____		DISPOSITION			AGAINST DEPARTMENT/PROCESS					
		Rework <input type="checkbox"/>	Scrap <input type="checkbox"/>	Use-as-is <input type="checkbox"/>	Skid-tube <input type="checkbox"/>	Machining <input type="checkbox"/>	Crosstube <input type="checkbox"/>	Water Jet <input type="checkbox"/>	Engineering <input type="checkbox"/>	
		Work Order Update <input type="checkbox"/>			Thermoforming <input type="checkbox"/>	Large Fab <input type="checkbox"/>	Finishing <input type="checkbox"/>	Prod. Eng. Coor. <input type="checkbox"/>	Quality <input type="checkbox"/>	
					Composite <input type="checkbox"/>	Rec/Store/Packaging <input type="checkbox"/>	Supplier <input type="checkbox"/>	Other <input type="checkbox"/>		
Root Cause	Date	Step	Qty	Description of work order update or Non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector	
Doc/Data										
Equip/Tooling										
Operator										
Material										
Setup										
Other										
Process										
Supplier										
Training										
Unapproved										
FAULT CATEGORY										
Landing Gear	General									
	Bending <input type="checkbox"/>	Bend <input type="checkbox"/>	Grain <input type="checkbox"/>	Ovalized <input type="checkbox"/>	Pressure/Forced <input type="checkbox"/>					
	Centre Not Concentric to O/S <input type="checkbox"/>	BOM/Route <input type="checkbox"/>	Hardware <input type="checkbox"/>	Over/Under tolerance <input type="checkbox"/>	Temperature/Cure <input type="checkbox"/>					
	Cracks <input type="checkbox"/>	Broken/Damaged <input type="checkbox"/>	Inspection Incomplete <input type="checkbox"/>	Part Incorrect <input type="checkbox"/>	Weld <input type="checkbox"/>					
	Crushed/Crimped <input type="checkbox"/>	Burrs <input type="checkbox"/>	Instructions Incomplete/Unclear <input type="checkbox"/>	Part Lost/Missing <input type="checkbox"/>	Wrong Stock Pulled <input type="checkbox"/>					
	Cuffs <input type="checkbox"/>	Contamination <input type="checkbox"/>	Maintenance <input type="checkbox"/>	Part Moved <input type="checkbox"/>						
	Heat Treat <input type="checkbox"/>	Countersink <input type="checkbox"/>	Mislabeled <input type="checkbox"/>	Positioned Wrong <input type="checkbox"/>						
	Inspection Strip in Tube <input type="checkbox"/>	Cut Too Short <input type="checkbox"/>	Misread <input type="checkbox"/>	Power Loss/Surge <input type="checkbox"/>	Other <input type="checkbox"/>					
	Ripples in Bend <input type="checkbox"/>	Drill Holes <input type="checkbox"/>	Offset <input type="checkbox"/>							
	Torque Waves in Extrusion <input type="checkbox"/>	Drawing <input type="checkbox"/>	Out of Calibration <input type="checkbox"/>							
	Turning Sequence <input type="checkbox"/>	Finish <input type="checkbox"/>	Out of Sequence <input type="checkbox"/>							
	Wave/Twist in Tube <input type="checkbox"/>	Folio <input type="checkbox"/>	Outside Dimensions <input type="checkbox"/>							

DART

DESIGN BW	DRAWN BY <i>PB</i>	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
CHECKED <i>UP</i>	APPROVED <i>10/10</i>	DRAWING NO. D2282	REV. E SHEET 1 OF 2
DATE 05.06.07		TITLE HANDLE TUBES	SCALE 1:1
A	94.10.14	NEW ISSUE	
B	95.03.23	RE-DESIGN	
C	97.10.20	CORRECTED NUMBERING SCHEME	
D	05.03.16	REDESIGN D2282-5; 0.795 WAS 0.750	
E	05.06.07	D2282-5 304 SS WAS 303 SS; R0.063 x 0.063 WAS R0.080 x 0.030	

**D2282-3****D2282-7****D2282-3/-7 TUBE:**

- 1) MATERIAL: T304/T316 3/8 SCHEDULE 40 (REF. DART SPEC. M304TR0.675W.091)
- 2) BREAK ALL UMARKED SHARP EDGES 0.005 TO 0.010
- 3) ALL DIMENSIONS ARE IN INCHES
- 4) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED

**D2282-5****D2282-5 STEM:**

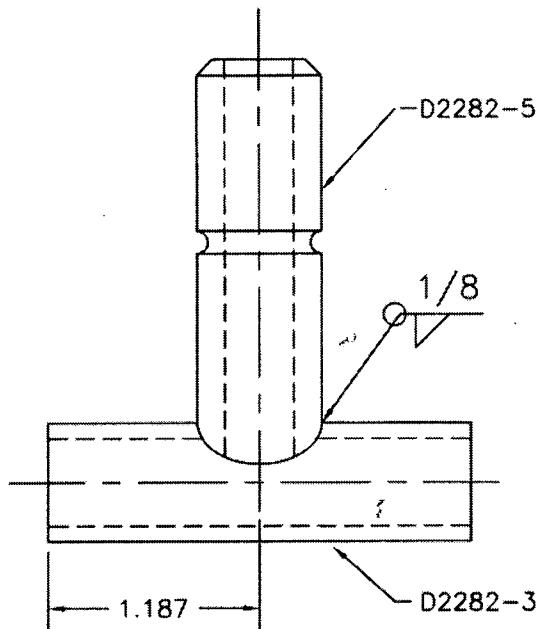
- 1) MATERIAL: AISI 304 STAINLESS STEEL (REF. DART SPEC. M304R0.750)
- 2) BREAK ALL UMARKED SHARP EDGES 0.005 TO 0.010
- 3) ALL DIMENSIONS ARE IN INCHES
- 4) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED

E

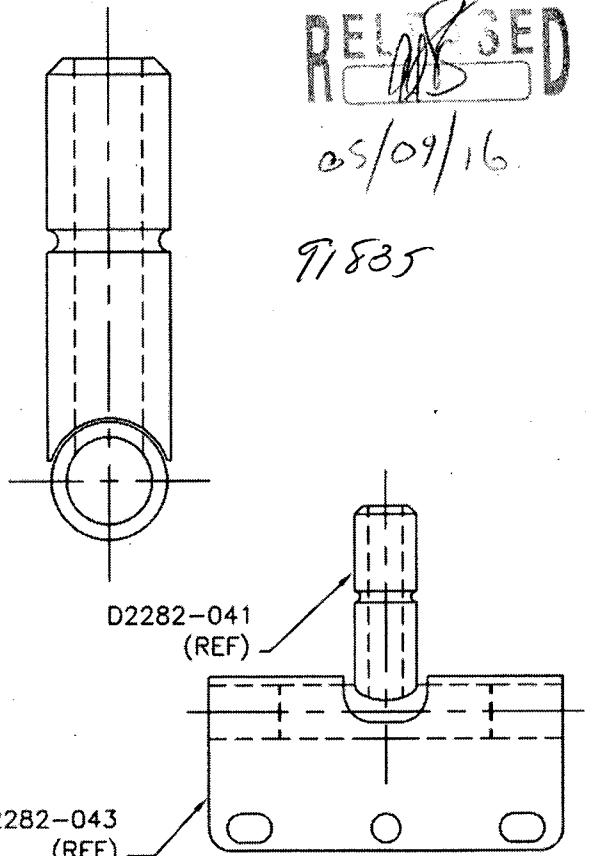
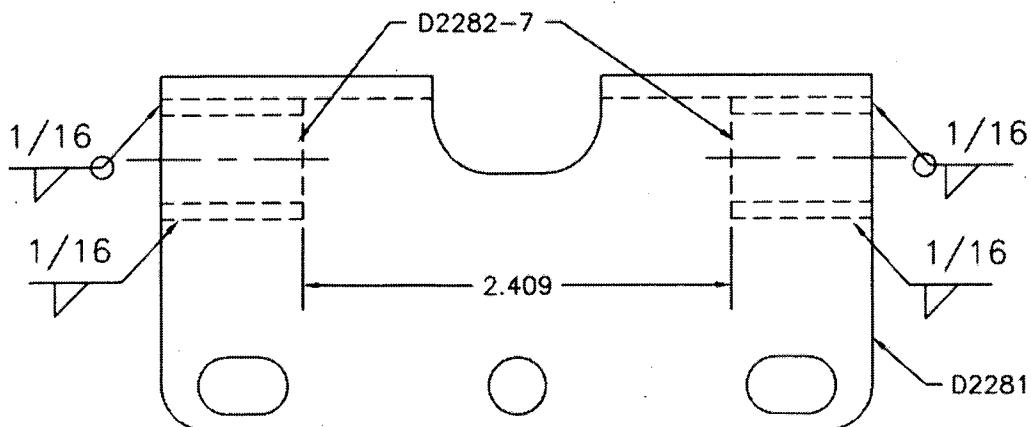


DART

DESIGN BW	DRAWN BY <i>TS</i>	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
CHECKED <i>UP</i>	APPROVED <i>AB</i>	DRAWING NO. D2282	REV. E SHEET 2 OF 2
DATE 05.06.07		TITLE HANDLE TUBES	SCALE 1:1

**D2282-041 'T' ASSEMBLY**

WELD ASSEMBLY PER DART QSI 004

**GENERAL ASSEMBLY**
SCALE 1:2**D2282-043 SADDLE ASSEMBLY**
WELD ASSEMBLY PER DART QSI 004

Copyright © 1994 by DART AEROSPACE LTD

THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.